

REMARKS**§ 103 Rejections**

Claims 1, 8-10 and 19-24 are rejected under 35 USC § 103(a) as being unpatentable over Morris (US 5792411) in view of Mitwalsky (US 5843363) for the reasons cited in the previous Office Action.

Claims 4, 6 and 7 are rejected under 35 USC § 103(a) as being unpatentable over the combination of Morris and Mitwalsky as applied to claim 1 above, and further in view of Nakada (JP 10321126) for the reasons cited in the previous Office Action.

Claim 5 is rejected under 35 USC § 103(a) as being unpatentable over the combination of Morris and Mitwalsky as applied to claim 1 above, and further in view of Yang (US 6382254) for the reasons cited in the previous Office Action.

The Examiner alleged that, “It would have been obvious to one of ordinary skill in the art to have selected material for the master mold taught by Morris consisting of a ceramic material on a metal layer, as taught by Mitwalsky. . . ”

In the response filed November 4, 2009, Applicant argued that Morris et al. clearly recites a master tooling comprised of a “flexible substrate” and a “flexible, unitary substrate”. One of ordinary skill in the art appreciates that a substrate having a ceramic material on a metal layer is NOT FLEXIBLE, NOR A UNITARY SUBSTRATE. Hence, replacing the “flexible” substrate of Morris with the ceramic material on a metal layer, as taught by Mitwalsky is clearly contrary to the teachings of Morris.

The Examiner alleges that there is motivation to combine these references simply on the basis that both “use laser ablation”. However, the Applicant submits that there is no motivation for making such combination when considering the totality of teachings of the Morris reference.

In the response filed November 4, 2009, Applicant also argued that Morris et al. expressly teaches away from precisely manufactured articles such as those having optical quality surfaces.

In response to this argument, the Examiner stated that, “The master tooling can be reasonably interpreted as suitable for duplication with high precision because the precision with which the fine structure is replicated from the master tooling has much more to do with the method by which the replicate is produced than how precisely the structure was originally created in the master tool.”

The Applicant submits that the allegation that, “The master tooling can be reasonable interpreted as suitable for duplication with high precision . . .” clearly ignores the express teachings of Morris.

The Applicant further submits that while the method by which the replicate is produced is also a factor in duplicating a fine structure with high precision, the replicate cannot have any higher precision than the tool from which it was formed. Hence, if the tool lacks sufficient precision, the replicate will also lack such precision.

The Applicant further submits that Mitwalsky concerns fabrication of a semiconductor. The top two dielectric layers and underlying metal layer function to provide electrical connections. Since Mitwalsky has nothing to do with the manufacture of microreplication master toolings, Mitwalsky is a non- analogous art reference and thus not combinable with Morris.

In conclusion, the Applicant submits that based on the totality of teaching of the cited references, one of ordinary skill in the art would not replace the flexible substrate of Morris with the dielectric and conductive layer of the semiconductor of Mitwalsky to arrive at Applicant’s invention.

Reconsideration and a timely allowance are respectfully requested.

Respectfully submitted,

April 13, 2010

Date

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833

By: /Carolyn A. Fischer/
Carolyn A. Fischer, Reg. No.: 39,091
Telephone No.: 651-575-3915